



IN THE CLAIMS

Please substitute the following claims in place of their originally-filed claims. The changes to these claims are shown in Appendix A.

A1

1. (Amended) A field transistor containing no gate insulating layer comprising:

a well region of a first conductivity type;

a field oxide layer for defining an active region on the well region;

high concentration source and drain regions of a second conductivity type separated from each other by a width of the field oxide layer;

a low concentration source region of the second conductivity type formed in the well region, the low concentration source region being adjacent to the high concentration source region and overlapped by one end of the field oxide layer;

a low concentration drain region of the second conductivity type formed in the well region, the low concentration drain region being adjacent to the high concentration drain region and overlapped by the other end of the field oxide layer; and

a gate conductive layer pattern formed on the field oxide layer, the gate conductive layer pattern overlapping parts of the low concentration source and drain regions of the second conductivity type.

A2

3. (Amended) The field transistor of claim 1, wherein the well region of the first conductivity type is formed on a semiconductor substrate of the first conductivity type.

A3
cont'd

19. (Amended) A semiconductor device containing no gate insulating layer, comprising:

a substrate comprising a well region of a first conductivity type;

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JAN 30 2003
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a field oxide layer located over a portion of the well region;

a first source region of a second conductivity type and a first drain region of a second conductivity type separated by the field oxide layer;

A3 and
a second source region having a second conductivity type concentration lower than the first source region, the second source region formed in the well region adjacent the first source region with a portion of the second source region underlying the field oxide layer;

a second drain region having a second conductivity type concentration lower than the first drain region, the second drain region formed in the well region adjacent the first drain region with a portion of the second drain region underlying the field oxide layer; and

a conductive layer formed over the field oxide layer, the conductive layer overlapping the second source region and the second drain region.

27. (Amended) A semiconductor device containing no gate insulating layer, comprising:

a substrate comprising a well region of a first conductivity type;

a field oxide layer located over the well region;

A4 and
a first source region of a second conductivity type and a first drain region of a second conductivity type separated by the field oxide layer;

a second source region having a second conductivity type concentration lower than the first source region, the second source region formed in the well region adjacent the first source region with a portion of the second source region underlying the field oxide layer;

a second drain region having a second conductivity type concentration lower than the first drain region, the second drain region formed in the well region adjacent the first drain region with a portion of the second drain region underlying the field oxide layer;

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end
a conductive layer formed over the field oxide layer, the conductive layer overlapping the second source region and the second drain region;

a gate electrode electrically connected to the conductive layer;

a source electrode electrically connected to the first source region; and

a drain electrode electrically connected to the first drain region.

29. (Amended) A system for electrostatic discharge protection containing a field transistor without a gate insulating layer, the field transistor comprising:

a substrate comprising a well region of a first conductivity type;

a field oxide layer located over the well region;

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a first source region of a second conductivity type and a first drain region of a second conductivity type separated by the field oxide layer;

a second source region having a second conductivity type concentration lower than the first source region, the second source region formed in the well region adjacent the first source region with a portion of the second source region underlying the field oxide layer;

a second drain region having a second conductivity type concentration lower than the first drain region, the second drain region formed in the well region adjacent the first drain region with a portion of the second drain region underlying the field oxide layer; and

a conductive layer formed over the field oxide layer, the conductive layer overlapping the second source region and the second drain region.